

**AMENDMENTS TO THE CLAIMS**

1. Claims 1 – 70 (Canceled)
71. (Previously presented) A jet fuel comprising a base fuel and at least one additive wherein the additive comprises:
  - a plant oil extract derived from grain;
  - a carotenoid; and
  - a thermal stabilizer.
72. (Previously presented) The jet fuel of claim 71, wherein the grain is selected from the group consisting of fescue, clover, wheat, barley, oats, rye, sorghum, flax, triticale, rice, corn, spelt, millet, amaranth, buckwheat, quinoa, kamut and teff.
73. (Previously presented) The jet fuel of claim 71 wherein the carotenoid is selected from the group consisting of  $\beta$ -carotene,  $\alpha$ -carotene, lycopene, leutin, betatene and mixtures thereof.
74. (Previously presented) The jet fuel of claim 71, wherein the thermal stabilizer is selected from the group consisting of vegetable oils, nut oils, animal oils and mixtures thereof.
75. (Previously presented) The jet fuel of claim 71 wherein the plant oil extract is derived from barley and the carotenoid is  $\beta$ -carotene.
76. (Previously presented) The jet fuel of claim 71 wherein the thermal stabilizer is meadowfoam oil.
77. (Previously presented) The jet fuel of claim 71 further comprising a diluent.
78. (Previously presented) The jet fuel of claim 71 further comprising a solvent selected from the group consisting of toluene, benzene, o-xylene, m-xylene, p-xylene, cyclohexanes, hexane, octanes,

nonanes, jet fuel, diesel fuel, gasoline, 2 cycle oil and resid fuel and mixtures thereof.

79. (Previously presented) The jet fuel of claim 71 further comprising at least one additive selected from the group consisting of octane improvers, cetane improvers, detergents, corrosion inhibitors, metal deactivators, ignition accelerators, dispersants, anti-knock additives, anti-run-on additives, anti-pre-ignition additives, anti-misfire additives, anti-wear additives, antioxidants, demulsifiers, carrier fluids, solvents, fuel economy additives, emission reduction additives, lubricity improvers, oxygenates and mixtures thereof.
80. (Canceled)
81. (Previously presented) A jet fuel comprising a base fuel and at least one additive wherein the additive comprises:
- a hydrophobic plant oil extract;
  - a carotenoid; and
  - a thermal stabilizer selected from the group consisting of peanut oil, cottonseed oil, rape seed oil, macadamia oil, avocado oil, palm oil, palm kernel oil, meadowfoam oil and mixtures thereof.
82. (Previously presented) The jet fuel of claim 81 wherein the plant oil extract is derived from a member of the Leguminosae family.
83. (Previously presented) The jet fuel of claim 81 wherein the plant oil extract is derived from grain.
84. (Previously presented) The jet fuel of claim 81 further comprising a diluent.
85. (Previously presented) The jet fuel of claim 81 further comprising a solvent selected from the group consisting of toluene, benzene, o-xylene, m-xylene, p-xylene, cyclohexanes, hexane, octanes,

nonanes, jet fuel, diesel fuel, gasoline, 2 cycle oil and resid fuel and mixtures thereof.

86. (Previously presented) The jet fuel of claim 81 further comprising at least one additive selected from the group consisting of octane improvers, cetane improvers, detergents, corrosion inhibitors, metal deactivators, ignition accelerators, dispersants, anti-knock additives, anti-run-on additives, anti-pre-ignition additives, anti-misfire additives, anti-wear additives, antioxidants, demulsifiers, carrier fluids, solvents, fuel economy additives, emission reduction additives, lubricity improvers, oxygenates and mixtures thereof.
87. (Previously presented) The jet fuel of claim 81, wherein the carotenoid is selected from the group consisting of  $\beta$ -carotene,  $\alpha$ -carotene, lycopene, leutin, betatene and mixtures thereof.
88. (Previously presented) The jet fuel of claim 81 wherein the plant oil extract is barley oil extract, the carotenoid is  $\beta$ -carotene.
89. (Previously presented) A jet fuel comprising a base fuel and at least one additive wherein the additive comprises:
- a plant oil extract selected from the group consisting of hops oil extract, fescue oil extract, barley oil extract, green clover oil extract, wheat oil extract and mixtures thereof;
  - a carotenoid; and
  - a thermal stabilizer.
90. (Previously presented) The jet fuel of claim 89 wherein the carotenoid is selected from the group consisting of  $\beta$ -carotene,  $\alpha$ -carotene, lycopene, leutin, betatene and mixtures thereof.
91. (Previously presented) The jet fuel of claim 89, wherein the thermal stabilizer is selected from the group consisting of vegetable oils, nut oils, animal oils and mixtures thereof.

- 92. (Previously presented) The jet fuel of claim 89 wherein the plant oil extract is derived from barley and the carotenoid is  $\beta$ -carotene.
- 93. (Previously presented) The jet fuel of claim 89 wherein the thermal stabilizer is meadowfoam oil.
- 94. (Previously presented) The jet fuel of claim 89 further comprising a diluent.
- 95. (Previously presented) The jet fuel of claim 89 further comprising a solvent selected from the group consisting of toluene, benzene, o-xylene, m-xylene, p-xylene, cyclohexanes, hexane, octanes, nonanes, jet fuel, diesel fuel, gasoline, 2 cycle oil and resid fuel and mixtures thereof.
- 96. (Previously presented) The jet fuel of claim 95 further comprising at least one additive selected from the group consisting of octane improvers, cetane improvers, detergents, corrosion inhibitors, metal deactivators, ignition accelerators, dispersants, anti-knock additives, anti-run-on additives, anti-pre-ignition additives, anti-misfire additives, anti-wear additives, antioxidants, demulsifiers, carrier fluids, solvents, fuel economy additives, emission reduction additives, lubricity improvers, oxygenates and mixtures thereof.
- 97. (Canceled)
- 98. (Canceled)
- 99. Canceled)
- 100. (Canceled)
- 101. (Canceled)
- 102. Claims 102 – 106 (Canceled)

107. (Previously presented) A jet fuel additive comprising  
a hydrophobic plant oil extract;  
a carotenoid;  
a thermal stabilizer selected from the group consisting of  
peanut oil, cottonseed oil, rape seed oil, macadamia oil, avocado  
oil, palm oil, palm kernel oil, meadowfoam oil and mixtures  
thereof;  
a solvent selected from the group consisting of toluene,  
benzene, o-xylene, p-xylene, m-xylene, cyclohexanes, hexane,  
octanes, nonanes, jet fuel, diesel fuel, gasoline, 2-cycle oil, resid  
fuel, and mixtures thereof.
108. (Previously presented) The additive of claim 107 wherein the plant  
oil extract is barley oil and the carotenoid is  $\beta$ -carotene.
109. (Previously presented) The additive of claim 101 wherein the  
thermal stabilizer is meadowfoam oil.
110. (Canceled)
111. (Canceled)
112. (New) A jet fuel additive comprising:  
a plant oil extract from barley;  
 $\beta$ -carotene; and  
meadowfoam oil.
113. (New) The additive of claim 112 further comprising a solvent  
selected from the group consisting of toluene, benzene, p-xylene,  
m-xylene, o-xylene, cyclohexanes, hexane, octanes, nonanes, jet  
fuel, diesel fuel, gasoline, 2-cycle oil, resid fuel and mixtures  
thereof.
114. (New) A jet fuel additive comprising:  
barley oil;

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$\beta$ -carotene; and  
meadowfoam oil.